



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,615	10/24/2003	William G. Hansen	D-2526/WOD	8793

7590 07/19/2004

William O'Driscoll - 12-1
Trane
3600 Pammel Creek Road
La Crosse, WI 54601

EXAMINER

DOERRLER, WILLIAM CHARLES

ART UNIT	PAPER NUMBER
----------	--------------

3744

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,615

Applicant(s)

HANSEN, WILLIAM G.

Examiner

William Doerrler

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 1. The recitation of "thought" (page 5, line 12) is presumed to be --throughout--.
 2. The recitation of "side view of Figure 8" (page 6, line 5) is presumed to be --side view of Figure 7--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-3, 5-6, 8, 11, 13-14, 16, and 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Initially, it is confusing as to whether the cover is a piece that is placed over the inlets or outlets or represents an enclosure that includes the opening and alternate area as described in these claims.
4. Claim 1 recites the limitation "cover-A defines an opening-A and an alternate area-A both of which overlay the supply air outlet" in line 6 of the claim. It is not clear as to whether the "alternate area-A" is another opening or a covering or something else.
5. Claim 2 recites the limitation "cover-B defines an opening-B and an alternate area-B both of which overlay the return air inlet" in line 3 of the claim. It is not clear as

Art Unit: 3744

to whether the "alternate area-B" is another opening or a covering or something else.

Claim 5 recites the limitation "alternate area-A and alternate area-B each define a substantially round opening" in line 2 of the claim. It is not clear as to whether the "alternate area-A" and/or "alternate area-B" is another opening or a covering or something else. Claim 13 rejected based on this same discrepancy.

6. Claims 19 and 20 recite the limitation that by "removing," "inverting," and "reattaching" the designated cover, "thereby changing the elevation of the opening." It is not explicitly stated that the panel is faced vertically in respect to the ground in order for this statement to be true.

7. Claims 3, 6, 8, 11, 14, and 16 are rejected to as based on the unclearness of the use of alternate area-A or alternate area-B as described above.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell (6,457,653) in view of Katsui et al. (6,067,227). Campbell teaches a cabinet 118 defining a supply air outlet 128 and a return air inlet 124, wherein the supply air outlet 128 and the return air inlet 124 are substantially equal in size and shape. In addition, Campbell teaches in lines 14-22 of column 7 that baffle 132 can be

Art Unit: 3744

manipulated to block openings when desired, and moved again to open the openings. Campbell also teaches an air handler for a building, comprising: a cabinet 100 disposed outside the building and defining a supply air outlet 128 and a return air inlet 124, wherein the supply air outlet 128 and the return air inlet 124 are substantially equal in size and shape. The air handler that Campbell teaches also has a compressor 224 inside the cabinet (Fig. 3), a condenser, an expansion device coupled to the condenser, and an evaporator 212 (Fig. 3) that is connected the compressor 224, the condenser, and the expansion device to provide a closed loop refrigeration circuit. Campbell teaches a blower 114 inside the cabinet 110 and forcing air from the return air inlet 112 to the supply air outlet 128 and across at one of the condenser and the evaporator. He continues to teach a supply air duct 128 extending from cover-A 130 to the building and a return air duct 124 extending from cover-B 132 to the building. Campbell's lines 12-14 state that insulated ducting is known.

While Campbell teaches most of the limitations of the claims, he does not explicitly teach a cover that includes an opening as well as an alternate area for either an inlet or outlet of the air handling equipment. Katsui et al. teaches a cover 29b (Fig. 5) being generally rectangular with a centerline, wherein the cover defines an opening 29a and an alternate area 29a both of which overlay the supply air outlet 4b and are offset relative to the centerline. In addition, Katsui et al. teaches an opening that is substantially rectangular. He continues to teach how the alternate area 29a defines a substantially round opening 4b. Katsui et al. further teaches how the opening 29a and alternate area 29a are vertically offset to each other. It can be assumed by the drawing

Art Unit: 3744

that the centerline is substantially vertical based on the figure taught by Katsui et al. Lastly, Katsui et al. teaches a flange 29d extending from alternate opening as stated in claim 8. It can be considered obvious based on design choice that the flange could be made round to match a duct to which it is attached. It would have been obvious from the teaching of Katsui et al to modify the air handler of Campbell by using covers having multiple openings which can be moved to change the position of the flowing air to permit one cover to be used for multiple differing air flows.

Claims 22 and 23 are rejected in combination of the teachings of Katsui et al. and Campbell. As previously stated, Campbell teaches removing cover-A 130 and cover-B 132 from enclosure and swapping positions of cover-A 130 and cover-B 132. If the cover taught by Katsui is used in Campbell's teaching, where cover-A has an opening on the bottom left corner and an alternate area on the upper right corner and cover-B has an opening on the bottom right corner and an alternate area on the upper left corner, then the swapping the covers would thereby change the distance between the two openings. Katsui teaches inverting a cover as shown in Fig. 16A where a cover is rotated in order to fit onto base. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, from the teaching of Katsui et al., to modify the interchanging air covers of Campbell by enabling alternate airflow paths depending on the orientation of the cover to enable the use of one vent in multiple configurations.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Akhtar et al. (6,623,353) teaches a venturi type air distribution system including a rectangular panel with air inlets and outlets.
- Brandt (3,089,315) teaches a convertible self-contained cooling unit for air conditioning that can be inverted into another position.
- Czul (4,098,093) teaches an air cooling system for large off road vehicles that has an air operated vent cover with two openings offset from each other.
- Kiser (5,376,045) teach a twin blower air house for supplying conditioned air to the interior of a building.

Sperr et al show a cooler with a plate which can be removed and flipped to change the direction of airflow.

Jorgensen shows a knockout plate which can be manipulated to change the positioning of openings.

Roan et al show an air handler with multiple positions.

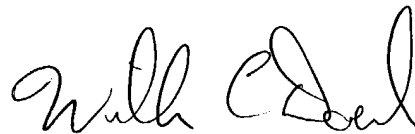
Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Doerrler whose telephone number is 703-308-0696. The examiner can normally be reached on Monday-Friday, 6:30 – 4:30.

Art Unit: 3744

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on 703-308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**WILLIAM DOERRLER
PATENT EXAMINER
GROUP 3400**